IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (currently amended)An address translator for connecting a network A conforming to ~~a~~ an addressing system P to a network B conforming to ~~a~~ an addressing system Q, said address translator comprising:

an address translating function for translating an address conforming to the addressing system P to an address conforming to the addressing system Q, or vice versa; and

a detecting function for detecting a communication conforming to a particular protocol based on at least one of information on a destination, and information on a port contained in a header of communication data,

wherein said address translator translates, by said address translation function, an address ~~described in a first region~~ of the communication data ~~by said address translation function~~to a Layer 3 address corresponding to Layer 3 of the Open System Interconnection (OSI) model, and

wherein when said address translator detects a communication conforming to said particular protocol, said address translator creates translation information including a correspondence relationship between addresses in the addressing system P and addresses in the addressing system Q for translating, by said address translation function, an address ~~described in a second region~~ of the communication data to a higher Layer address corresponding to a Layer higher than Layer 3 of the OSI model.

2. (currently amended) The address translator according to claim 1, further comprising:

communicating means for communicating with a server device,

wherein said address translator sends said translation information to said server device, and receives information including said higher Layer address corresponding to the layer higher than Layer 3 of the OSI model that~~second region which~~ has been translated by said server device.

3. (currently amended) The address translator according to claim 1, further comprising:

a processing part for translating ~~an~~ said Layer 3 address ~~described in the second region~~ of the communication data.

4. (currently amended) A method of processing a message including a first portion and a second portion, comprising:

first translation processing for translating information in the first ~~part~~ portion from information conforming to a first addressing system to information conforming to a second addressing system;

wherein said first translation processing translates said information in the first portion to a Layer 3 address corresponding to Layer 3 of the Open System Interconnection (OSI) model;

determination processing for determining whether or not the second portion requires a translation based on at least one of information on a destination, and information on a port contained in a header of the message; and

second translation processing for translating information in the second portion, determined to require a translation, from information conforming to the first addressing system to information conforming to the second addressing system~~.~~

wherein said second translation processing, upon determining that translation is required, translates said information in the second portion to a higher Layer address corresponding to a Layer higher than Layer 3 of the OSI model.

5. (currently amended)The message processing method according to claim 4, further comprising:

using a first server and a second server;

performing said first translation processing in said first server;

transferring the information in said second portion from said first server to said second server;

extracting, by said second server, ~~extracting~~ a parameter which requires a translation from said second portion;

performing said second translation processing on said extracted parameter in said second server; and

transferring the information in said second portion which has undergone said second translation processing from said second server to said first server.

6. (currently amended)The message processing method according to claim 5, wherein~~:~~ said second server has a table indicative of parameters

which require a translation, and extracts a parameter which requires a translation from said second portion based on said table.

7. (currently amended)The message processing method according to claim 5, wherein said first server transfers the parameter which requires a translation together, with a tag added thereto, in said second portion to said second server, and

wherein said second server extracts a parameter which requires a translation from said second portion based on said tag.

8. (currently amended)The message processing method according to claim 4, wherein said first portion is an IP header, said second portion is a payload including ~~an~~ a Session Initiation Protocol (SIP) message, one of said first protocol and second protocol is IPv4, the other is IPv6, and information for translation is an address.

9. (currently amended)An address translator connected to both a first network conforming to a first addressing system and a second network conforming to a second addressing system, said address translator comprising:

a memory part for holding a translation rule for translating said first addressing system to said second addressing system, or vice versa;

a translating part for translating a first address in input information conforming to said first addressing system to a second address conforming to said second addressing system, or vice versa based on said translation rule,

wherein a communication having information conforming to said first addressing system is detected based on at least one of information of a destination and information on a port contained in a header of the communication;

wherein said translating part translates said first address in the input information to a Layer 3 address corresponding to Layer 3 of the Open System Interconnection (OSI) model, and

wherein said translating part, upon detecting at least one of a predetermined destination information and port information, translates said first address of the input information to a higher Layer address corresponding to a Layer higher than Layer 3 of the OSI model; and

a function of outputting said input information and said translation rule.

10. (currently amended) The address translator according to claim 9, further comprising:

a function of receiving said input information having a translated address using said outputted input information and translation rule.

11. (currently amended) The address translator according to claim 10, further comprising:

a communication function for communicating with a server device,

wherein said address translator sends said input information to said server device, and receives said input information having an address translated by said server device.

12. (currently amended) The address translator according to claim 11, further comprising:

a function of detecting a Session Initiation Protocol~~an~~ (SIP) communication; and

a function of creating translation information including a correspondence relationship between an address in the first network conforming to the first addressing system and an address in the second network conforming to the second addressing system, in association with said server device, when an SIP communication is detected.

13. (currently amended) An address translator according to claim 12, further comprising:

a function of detecting information for translation included in the Session Initiation Protocol (SIP) communication, and adding identification information to said information for translation.

Claim 14 (canceled).

15. (original) An address translator according to claim 10, further comprising:

a processing part connected through an internal bus,

wherein said input information is sent to said processing part through said internal bus, and said input information having a protocol translated by said processing part is received through said internal bus.

16. (currently amended) In a communication network in which a network conforming to a protocol P and a network conforming to a protocol Q are interconnected through an address translator, a server device operative in cooperation with said address translator,

wherein said server device translates an address of a predetermined portion, the address of which has not been translated by said address translator, using translation information including a translation rule between the protocol P and the protocol Q which is stored in said address translator, ~~and~~

wherein said translation information further includes ~~in~~ information for specifying said predetermined portion~~.~~,

wherein said address translator translates an address of a communication portion to a Layer 3 address corresponding to Layer 3 of the Open System Interconnection (OSI) model, and

wherein said server device, upon detecting the address of the predetermined portion, translates the address of the predetermined portion to a higher Layer address corresponding to a Layer higher than Layer 3 of the OSI model.

Claims 17-19 (canceled).

20. (previously presented) The address translator according to claim 2, wherein said address translator sends information in said second region of the communication data with the translation information, and said

information in said second region comprises parameter which requires translation.

21. (previously presented) The address translator according to claim 20, wherein said address translator sends the information in said second region with a tag added to said parameter by said address translator,

wherein said server device extracts the parameter which requires a translation from the second region based on said tag.

22. (previously presented) The address translator according to claim 1, wherein in case of that the addressing system P is IPv4, the addressing system Q is IPv6, and

wherein in case of that the addressing system P is IPv6 and the addressing system Q is IPv4.

23. (previously presented) The message processing method according to claim 4, wherein in case of that the first addressing system is IPv4, the second addressing system is IPv6, and

wherein in case of that the first addressing system is IPv6, the second addressing system is IPv4.

24. (previously presented) The message processing method according to claim 4, wherein said first server sends information in said second portion with a translation information including a correspondence relationship between addresses in the first addressing system and addresses

in second addressing system for translating an address in the second portion, and said information in said second portion comprises parameter which requires a translation.